Case Study 4 (Singapore Airbnb)

In [1]:

```python
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sb
```

Load data from csv

In [2]:

```python
sgData = pd.read_csv("listings.csv")
```

Choose Discrete and Continuous Data

In [3]:

```python
sgDiscreteData=sgData[["minimum_nights", "availability_365"]]
sgContinuousData=sgData[["id", "host_id", "latitude", "longitude", "price", "number_of_reviews", "reviews_per_month", "calculated_host_listings_count"]]
```
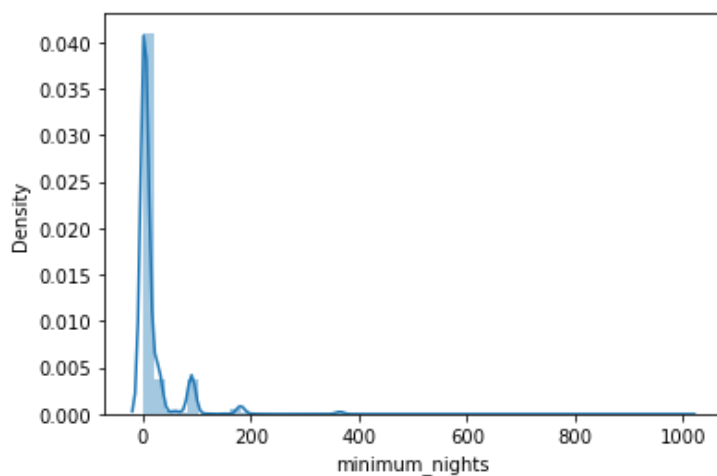
Plot Discrete data histogram and pdf

In [4]:

```python
sb.distplot(sgDiscreteData["minimum_nights"])
```

C:\Users\micha\anaconda3\lib\site-packages\seaborn\distributions.py:2551: FutureWarning: `distplot` is a deprecated function and will be removed in a future version. Please adapt your code to use either `displot` (a figure-level function with similar flexibility) or `histplot` (an axes-level function for histograms).
  warnings.warn(msg, FutureWarning)

Out[4]:

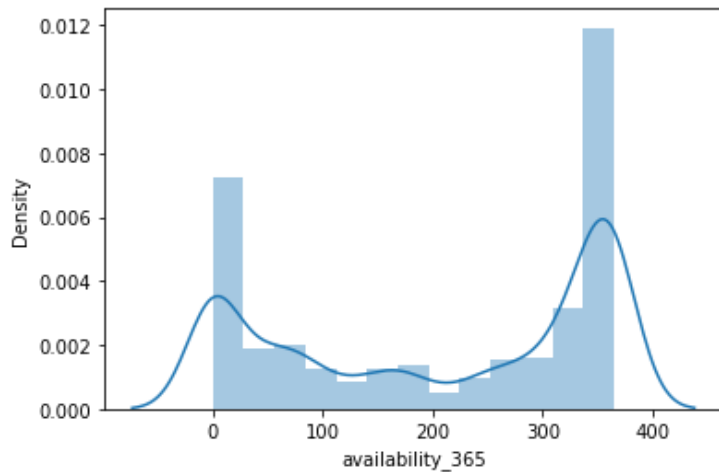<AxesSubplot:xlabel='minimum_nights', ylabel='Density'>

In [5]:

```python
sb.distplot(sgDiscreteData["availability_365"])
```

C:\Users\micha\anaconda3\lib\site-packages\seaborn\distributions.py:2551: FutureWarning: `distplot` is a deprecated function and will be removed in a future version. Please adapt your code to use either `displot` (a figure-level function with similar flexibility) or `histplot` (an axes-level function for histograms).

```
      warnings.warn(msg, FutureWarning)
```

```
<AxesSubplot:xlabel='availability_365', ylabel='Density'>
```
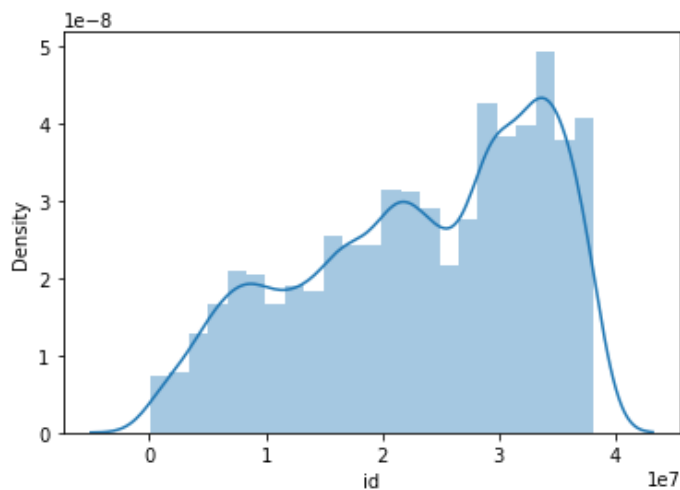

Plot Continuous data histogram and pdf

In [6]:

```
sb.distplot(sgContinuousData["id"])
```

```
C:\Users\micha\anaconda3\lib\site-packages\seaborn\distributions.py:2551: FutureWarning:
`distplot` is a deprecated function and will be removed in a future version. Please adapt
your code to use either `displot` (a figure-level function with similar flexibility) or `
histplot` (an axes-level function for histograms).
  warnings.warn(msg, FutureWarning)
```

Out[6]:

```
<AxesSubplot:xlabel='id', ylabel='Density'>
```
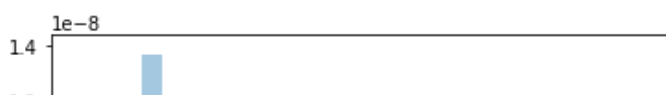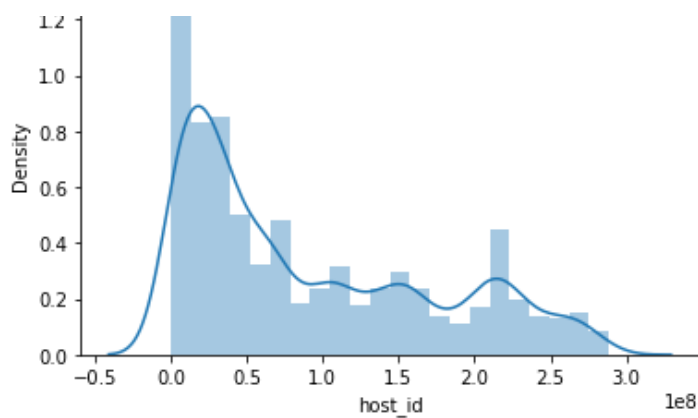

In [7]:

```
sb.distplot(sgContinuousData["host_id"])
```

```
C:\Users\micha\anaconda3\lib\site-packages\seaborn\distributions.py:2551: FutureWarning:
`distplot` is a deprecated function and will be removed in a future version. Please adapt
your code to use either `displot` (a figure-level function with similar flexibility) or `
histplot` (an axes-level function for histograms).
  warnings.warn(msg, FutureWarning)
```

Out[7]:

```
<AxesSubplot:xlabel='host_id', ylabel='Density'>
```

```
sb.distplot(sgContinuousData["latitude"])
```

C:\Users\micha\anaconda3\lib\site-packages\seaborn\distributions.py:2551: FutureWarning:
`distplot` is a deprecated function and will be removed in a future version. Please adapt
your code to use either `displot` (a figure-level function with similar flexibility) or `
histplot` (an axes-level function for histograms).
  warnings.warn(msg, FutureWarning)

Out[8]:
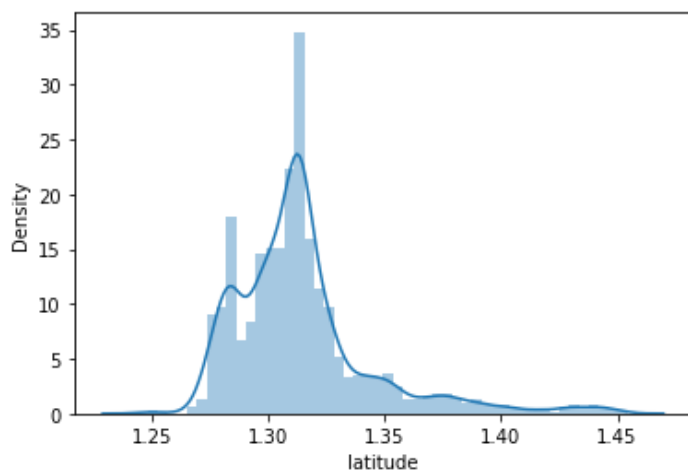
```
<AxesSubplot:xlabel='latitude', ylabel='Density'>
```
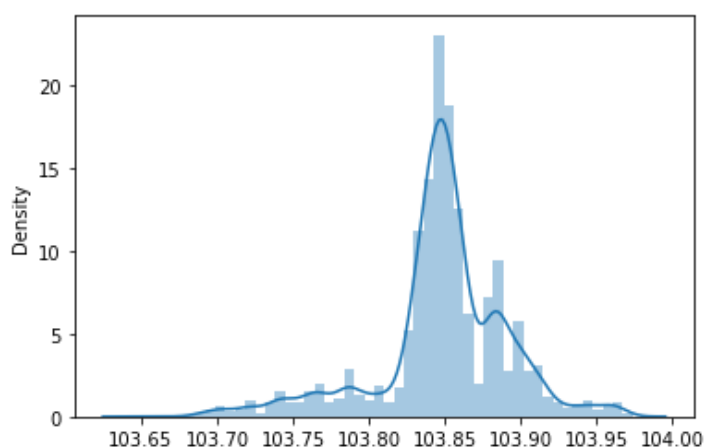

In [9]:

```
sb.distplot(sgContinuousData["longitude"])
```

C:\Users\micha\anaconda3\lib\site-packages\seaborn\distributions.py:2551: FutureWarning:
`distplot` is a deprecated function and will be removed in a future version. Please adapt
your code to use either `displot` (a figure-level function with similar flexibility) or `
histplot` (an axes-level function for histograms).
  warnings.warn(msg, FutureWarning)

Out[9]:

```
<AxesSubplot:xlabel='longitude', ylabel='Density'>
```

In [10]:

```python
sb.distplot(sgContinuousData["price"])
```

```
C:\Users\micha\anaconda3\lib\site-packages\seaborn\distributions.py:2551: FutureWarning:
`distplot` is a deprecated function and will be removed in a future version. Please adapt
your code to use either `displot` (a figure-level function with similar flexibility) or `
histplot` (an axes-level function for histograms).
  warnings.warn(msg, FutureWarning)
```
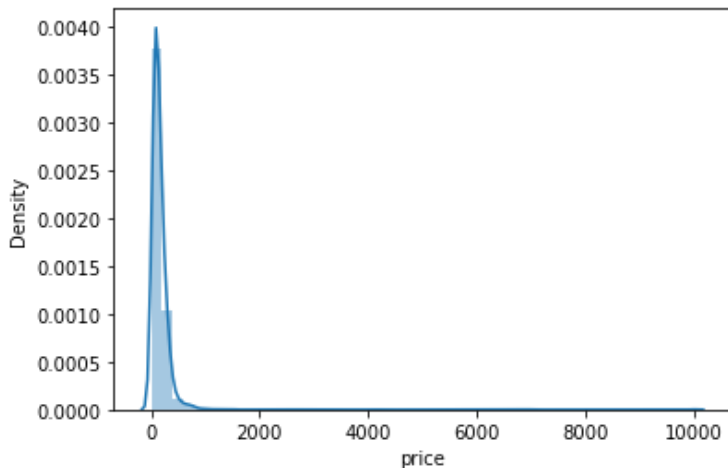
Out[10]:

```
<AxesSubplot:xlabel='price', ylabel='Density'>
```


In [11]:

```python
sb.distplot(sgContinuousData["number_of_reviews"])
```

```
C:\Users\micha\anaconda3\lib\site-packages\seaborn\distributions.py:2551: FutureWarning:
`distplot` is a deprecated function and will be removed in a future version. Please adapt
your code to use either `displot` (a figure-level function with similar flexibility) or `
histplot` (an axes-level function for histograms).
  warnings.warn(msg, FutureWarning)
```
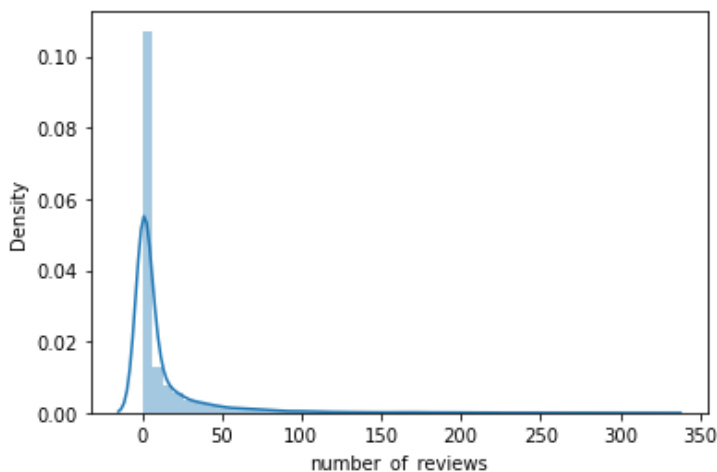
Out[11]:

```
<AxesSubplot:xlabel='number_of_reviews', ylabel='Density'>
```


In [12]:

```python
sb.distplot(sgContinuousData["reviews_per_month"])
```

```
C:\Users\micha\anaconda3\lib\site-packages\seaborn\distributions.py:2551: FutureWarning:
`distplot` is a deprecated function and will be removed in a future version. Please adapt
your code to use either `displot` (a figure-level function with similar flexibility) or `
histplot` (an axes-level function for histograms).
  warnings.warn(msg, FutureWarning)
```

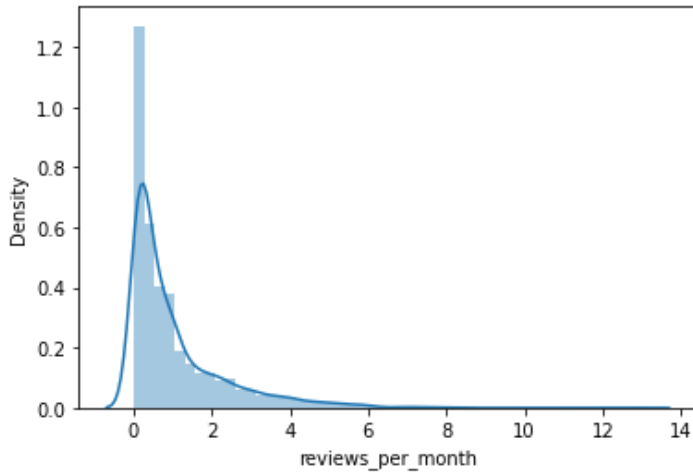Out[12]:

```
<AxesSubplot:xlabel='reviews_per_month', ylabel='Density'>
```

```
sb.distplot(sgContinuousData["calculated_host_listings_count"])
```

```
C:\Users\micha\anaconda3\lib\site-packages\seaborn\distributions.py:2551: FutureWarning:
`distplot` is a deprecated function and will be removed in a future version. Please adapt
your code to use either `displot` (a figure-level function with similar flexibility) or `
histplot` (an axes-level function for histograms).
  warnings.warn(msg, FutureWarning)
```

Out[13]:

```
<AxesSubplot:xlabel='calculated_host_listings_count', ylabel='Density'>
```